

10/587045
02-25-09

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
11 August 2005 (11.08.2005)

PCT

(10) International Publication Number
WO 2005/072734 A1

(51) International Patent Classification⁷: **A61K 31/4468, A61P 9/00**

(74) Agents: ASAMURA, Kiyoshi et al.; Room 331, New Otemachi Bldg., 2-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-0004 (JP).

(21) International Application Number:

PCT/JP2005/001444

(22) International Filing Date: 26 January 2005 (26.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2004-020859 29 January 2004 (29.01.2004) JP

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): OT-SUKA PHARMACEUTICAL CO., LTD. [JP/JP]; 9, Kanda-Tsukasacho 2-chome, Chiyoda-ku, Tokyo, 1018535 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HASHIMOTO, Ayako [JP/JP]; 2-306, La Fore, 5-1, Kanaoka, Kawauchi-cho, Tokushima-shi, Tokushima, 7710125 (JP). IMAIZUMI, Takashi [JP/JP]; 1-27, Aza Higashihama, Minamihama, Muya-cho, Naruto-shi, Tokushima, 7720003 (JP). MIYAKODA, Goro [JP/JP]; 697-15, Nagagishi, Matsuhige-cho, Itano-gun, Tokushima, 7710211 (JP). MORI, Toyoki [JP/JP]; 101-8, Miyanonishi, Kitahama, Muya-cho, Naruto-shi, Tokushima, 7720015 (JP).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A1

(54) Title: PHARMACEUTICAL COMPOSITION FOR PROMOTING ANGIOGENESIS



(57) Abstract: The present invention provides a pharmaceutical composition for promoting angiogenesis, which has an angiogenesis promoting action even in a vascular culturing system without effect of microcirculation. A pharmaceutical composition for promoting angiogenesis of the present invention comprises at least one compound selected from a group consisting of a piperidine compound represented by the general formula (1) or salts thereof:

(wherein R represents a benzoyl group which may have, as substituents on the phenyl ring, 1 to 3 groups selected from a group consisting of an amino group, which may have a lower alkanoyl group, and a lower alkyl group; R¹ represents a hydrogen atom or a lower alkyl group; and R² represents a phenyl lower alkyl group).

WO 2005/072734 A1